Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A system for processing film comprising:
an applicator operable to coat a developer solution to the film;
a first light source operable to illuminate the coated film with a first light;

a first sensor having sensor non-uniformities, the first sensor operable to measure the first light from an exposed and an unexposed portion of the coated film to produce corresponding exposed image data and unexposed data; and

a processing system coupled to the first sensor and operable to determine a first set of non-uniformity data using the unexposed data and adjusting the exposed image data in response to the first set of non-uniformity data.

2. (Original) The system of claim 1, wherein the processing system also operates to:

dim the first light source for at least a portion of the time that the first sensor measures the first light form the unexposed region of the coated film;

capture a second set of unexposed data while the first light source is dimmed to determine a second set of non-uniformity data; and

adjust the exposed image data obtained from the coated film in response to the second set of non-uniformity data.

- 3. (Original) The system of Claim 1, wherein the first light measured by the first sensor comprises light transmitted through the coated film.
- 4. (Original) The system of Claim 1, wherein the first light measured by the first sensor comprises light reflected from the coated film.
- 5. (Original) The system of Claim 1, wherein the first light measured by the first sensor comprises light reflected from and through the coated film.
- 6. (Original) The system of claim 1, wherein the first light comprises infrared light.

- 7. (Original) The system of Claim 1, wherein the first light comprises light within the visible portion of the electromagnetic spectrum.
- 8. (Original) The system of Claim 1, further comprising a second light source operable to illuminate the coated film with a second light, and the first sensor is operable to measure the second light from the coated film.
- 9. (Original) The system of Claim 8, wherein the first sensor measures the first light reflected from the film and measures the second light transmitted through the film.
- 10. (Original) The system of Claim 8, wherein the first light comprises visible light and the second light comprises infrared light.
- 11. (Original) The system of Claim 1, wherein the processing system operates to normalize the exposed image data.
- 12. (Original) The system of Claim 1, wherein the exposed image data is adjusted using a gain factor determined in response to an actual maximum pixel value derived from the measurements from the first sensor.
- 13. (Original) The system of Claim 1, wherein the system is embodied in a self service film processing kiosk.
- 14. (Original) A method for estimating sensor and illumination non-uniformities, comprising:

capturing a first plurality of readings to determine a first set of non-uniformity data from a first sensor operable to capture light reflected from film illuminated by a first light source while the film has a developer chemical applied thereto, the first sensor responsive to light reflected from an unexposed region of film; and

adjusting image data obtained from the film in response to the first set of non-uniformity data.

15. (Original) The method of Claim 14, further comprising:
dimming the first light source for at least a portion of the time that
the first sensor is being used to sense the unexposed region of the film;

capturing a second plurality of readings from the first sensor while the first light source is dimmed to determine a second set of non-uniformity data; and

adjusting image data obtained from the film in response to the second set of non-uniformity data.

- 16. (Original) The method of Claim 14, wherein the first light source utilizes one of the group consisting of the infrared spectrum, the nonvisible spectrum, and the near-infrared spectrum.
- 17. (Original) The method of Claim 14, further comprising: capturing a plurality of readings from each of a plurality of sensors responsive to light reflected from a plurality of unexposed regions of the film to determine additional non-uniformity data, the plurality of sensors each operable to capture light reflected from the first side of the film at a different development time of the film illuminated by at least one of the plurality of light sources; and adjusting image data obtained from the film in response to the additional non-uniformity data.
- 18. (Original) The method of Claim 14, further comprising adjusting the image data using a gain factor determined in response to an actual maximum pixel value derived from the readings from the first sensor.
- 19 (Original) The method of Claim 18, wherein the gain factor is determined by:

generating a histogram comprising an actual maximum pixel value in response to the readings;

determining a set point wherein a quantity of the first plurality of readings exceeds a threshold; and

determining the gain factor in response to the set point.

- 20. (canceled)
- 21. (Original) The method of claim 14 wherein the first plurality of readings is captured from a dry uncoated portion of the film.
- 22. (Original) The method of Claim 14 wherein the first plurality of readings is captured from a dry, uniform target other than film.

23. (Original) The method of Claim 15, wherein the second plurality of readings is captured from a dry uniform target other than film.